ROUTING RECORD

Dare	TT JEE	1 10	ACTION
10/26/07	A	ゴ	Transfer 14
10/30/07	AD W	GRADI	Presideen 119
10/31/07	GRAL	 	I C/c accept
11/2-107	GRAI	HDAI	PO Kelory-
7-2908	ADOY	CTX VI	50 Approved
	1		
		 	
		 	
	1	DEC 150	MOUNTING VARIANCES
REFERENCE TO	J1177. 1.41		THE VARIANCES

F95588

10

APPL # 474770 I.D. # 29110

ORANGE COUNTY SANITATION DISTRICT 22212 BROOKHURST ST HUNTINGTON BEACH ICE

Date: 10/19/07

2935 BHP. 2.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT 21865 Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Page 1 Permit No. F95588 A/N 474770

ID 29110

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership. If the billing for the annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner

or Operator:

ORANGE COUNTY SANITATION DISTRICT

P O BOX 8127

FOUNTAIN VALLEY, CA 92728-8127

Equipment Location:

22212 BROOKHURST ST, HUNTINGTON BEACH, CA 92646-8457

Equipment Description:

INTERNAL COMBUSTION ENGINE, NO. 1 AT PB-B, DETROIT DIESEL, 16 CYLINER, TURBOCHARGED, AFTERCOOLED, MODEL T163-7K16, 2935 BHP, SERIAL NUMBER DD5272000532, DIESEL -FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

Conditions:

- 1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
- THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
- 3. THIS ENGINE SHALL NOT OPERATE MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
- 4. AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
- 5. THE OPERATION OF THE ENGINE BEYOND 50 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.
- 6. AN ENGINE OPERATING LOG SHALL BE MAINTAINED WHICH ON A MONTHLY BASIS SHALL LIST ALL ENGINE OPERATIONS IN EACH OF THE FOLLOWING AREAS:
 - A. EMERGENCY USE HOURS OF OPERATION
 - B. MAINTENANCE AND TESTING HOURS

FILE COPY



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT 21865 Copley Drive, Diamond Bar, CA 91765

Page 2 Permit No. F95588 A/N 474770

PERMIT TO OPERATE

C. OTHER OPERATING HOURS (DESCRIBE THE REASON FOR OPERATION) IN ADDITION, EACH TIME THE ENGINE IS STARTED MANUALLY, THE LOG SHALL INCLUDE THE DATE OF OPERATION AND THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION THE LOG SHALL BE KEPT FOR A MINIMUM OF FIVE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION FOR THE PREVIOUS CALENDAR YEAR SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR.

7. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Dorris M.Bailey/GR01

2/27/2008



South Coast Air Quality Management District

Form 400-A

AOMO: Application For Permit To Construct and Permit To Operate

Mail Application To: P.O. Box 4944 Diamond Bar, CA 91765

> Tel: (909) 396-3385 www.aqmd.gov

Section A: Operator Information				
Business Name of Operator To Appear				
Orange County Sanitation Distr 2. Valid AQMD Facility ID (Available on Po		Quante Pusinosa No-	na /only	y If different from Business Name of Operator):
issued by AQMD): 029110	erunt oran orde	. Owner's business nan	is (only	y ir dillerent from Business wante of Operator).
Section B: Equipment Location			Sec	tion C: Permit Mailing Address
4. Equipment Location Address:	in A ONEDIa fordadistica			Permit and Correspondence Information:
For equipment operated at various location	is in AQMO s junsaicuoli, į			Check here if same as equipment location address
Street Address			100	844 Ellis Avenue et Address
Huntington Beach		646 _	For	untain Valley <u>CA</u> , <u>92708</u> _ <u>7018</u>
City	State Zip Cod	le	City	State Zip Code
County: O Los Angeles Orange (San Bernardino C) Riverside	Count	nty: O Los Angeles Orange O San Bernardino O Riverside
Contact Name: Vladimir Kogan			Conta	act Name: Vladimir Kogan
Contact Title: Senior Scientist	Phone: <u>(714</u>	1) 593-7085		act Title: Senior Scientist Phone: (714) 593-7085
Fax: (714) 962-8379 E-Mai	; vkogan@ocsd.	com	Fax:	(714) 962-8379 E-Mail: vkogan@ocsd.com
	he facility is in	ORECLAIM OTIT	e V	O RECLAIM & Title V Program (please check if applicable)
6. Reason for Submitting Application (Se	elect only ONE):			7. Estimated Start Date of Operation/Construction (MM/DD/YYYY):
New Construction (Permit to Construct)	O Permitted Equipm Permit Approval*	ent Altered/ Modified Withou	ıt	8. Description of Equipment:
Equipment Operating Without A Permit or Expired Permit*	O Proposed Alteration Equipment	on/Modification to Permitted		Internal Combustion Engine, Detroit Diesel, 16 cylinder, turbocharged, aftercooled, Model Tl63-7K16, 2935 BHP, Diesel fueled, driving an emergency electrical generator
Administrative Change	Change of Condit	ion For Permit To Operate		
Constructed or Operational	Change of Condit	ion For Permit To Construct		9. Is this equipment portable AND will it be operated at different locations within AQMD's jurisdiction? No O
O Title V Application (Initial, Revisions, etc.) (Also complete Form 500-TV)		on-Moving to New Site		For Identical equipment, how many additional applications are being submitted with this application? (Form 400-A required for each)
Compliance Plan	(If you checked any of the it	ermit/Application Number: pins in this column, you MUST		11. Are you a Small Business as per AQMD's Rule 102 definition?
O Facility Permit Amendment	provide a existing Permit/A	Polication Number 977		(10 employees or less and total gross receipts are \$500,000 or less, or a not-for-profit training center?)
O Registration/Certification				12. Has a Notice of Violation (NOV) or a Notice To Comply (NC) been issued for this equipment?
O Streamlined Standard Permit				No O Yes If yes, provide NOV/NC #:
* A Higher Permit Processing Fee applies to the		sk (Rule 301 (c) (1) (D)		Too it you provide troating it.
Section E: Facility Business Info 13. What type of business is being condu		location?	14.	What is your businesses primary NAICS Code
Sewage Treatment	at any oquipment		"	(North American Industrial Classification System)? 221320
15. Are there other facilities in the SCAQM by the same operator?	D jurisdiction operated	O No O Yes	16.	Are there any schools (K-12) within a 1000-ft. radius of the equipment physical location?
	IFE I hereby certify that al		and info	ormation submitted with this application is true and correct.
17. Signature of Responsible Official:		18. Title:		Check List
Miball	Gore	Manager, ECRA		E Form(s) signed and dated by authorized official Supplemental Equipment Form (400-E-XX or 400-E-GEN)
19. Print Name:		20. Date:		CEQA Form (400-CEQA) attached
Michael D. Moore		10/8/07	<u></u>	Payment for permit processing fee attached Your application will be rejected if any of the above items are missing.
		-		
AOMD APPLICATION/TRAC	70 Oco		RY CO	
ENG. (A) R ENG. A DATEGIC (0/3) 07 DATE	R CLASS	1 #1	er	*1000000009 923 50
South Coast Air Quality Management District,	Form 400-A (2004.05)	1 3		(0000 100)

C/C Ident. Eq.

'07. OCT 19 P1:16

Mail Application To: P.O. Box 4944 Diamond Bar, CA 91765

Tel: (909) 396-3385

www.aqmd.gov

The SCAQMD is required by state law, the California Environmental Quality Act (CEQA), to review discretionary permit project applications for potential air quality and other environmental impacts. This form is a screening tool to assist the SCAQMD in clarifying whether or not the project! has the potential to generate significant adverse environmental impacts that might require preparation of a CEQA document [CEQA Guidelines §15060(a)]. Refer to the attached instructions for guidance in completing this form. For each Form 400-A application, also complete and submit one Form 400-CEQA. If submitting multiple Form 400-A applications for the same project at the same time, only one 400-CEQA form is necessary for the entire project. If you need assistance completing this form, contact Lori Inga at (909) 396-3109.

FACILITY ANTEON LATION CO.

Busines	s Name of	Operator	to Appear on the Permit:	Facility ID (6-Digit):
Orang	ge Count	y Sanita	ation District	029110
Project	Descriptio	n:		
Chan testin	ge of cor g purpos	ndition t ses shou	to an existing stationary emergency diesel engine permit. T uld be revised from 20 to 50 hours per year based on attact	he permitted allowance for maintenance and hed source-testing results (Rule 1470)
REVIE	WFOR	EXEMPT	ION FROM FURTHER CEQA ACTION	
	Yes" or "No			
	Yes	No	as this application to	
A.	0	•	A CEQA and/or NEPA document previously or currently preparer permit cannot be issued until a Final CEQA document and Notice of Determin	
₿.	0	•	A request for a change of permittee only (without equipment mo	difications)?
C.	0	•	Equipment certification or equipment registration (qualifies for Rule	222) ?
D.	0	0	A functionally identical permit unit replacement with no increase	in rating or emissions?
E.	0	•	A change of daily VOC permit limit to a monthly VOC permit limit	?
F.	0	0	Equipment damaged as a result of a disaster during state of eme	rgency?
G.	0	•	A Title V (i.e., Regulation XXX) permit renewal (without equipment n	nodifications)?
Н.	0	•	A Title V administrative permit revision?	
i.	0	•	The conversion of an existing permit into an initial Title V permit	?
If "Yes" date thi		i for any qu	uestion above, your application does not require additional evaluation for CEQA	applicability. Skip to page 2, "SIGNATURES" and sign and
REVIE	W OF IN	PACTS	WHICH MAY TRIGGER CEQA ************************************	和 信使用一个 的数 ~~~老点那些黑色
	te Sections t to this form		ecking "Yes" or "No" as applicable. To avoid delays in processing your application	on(s), explain all "Yes" responses on a separate sheet and
	Yes	No	Section I - General	
1.	0	•	Has this project generated any known public controversy regard generated by the project? Controversy may be construed as concerns raised by local groups at public mewspapers or other periodical publications, local news programs, environme	neetings; adverse media attention such as negative articles in
2.	0	•	Is this project part of a larger project?	
			Cont. 13 (19 (19 (19 (19 (19 (19 (19 (19 (19 (19	
3.	0	•	Will there be any demolition, excavating, and/or grading constru 20,000 square feet?	ction activities that encompass an area exceeding
4.	0	0	Does this project include the open outdoor storage of dry bulk s include a plot plan with the application package.	olid materials that could generate dust? If Yes,

¹ A "project" means the whole of an action which has a potential for resulting in physical change to the environment, including construction activities, dearing or grading of land, improvements to existing structures, and activities or equipment involving the issuance of a permit. For example, a project might include installation of a new, or modification of an existing internal combustion engine, dry-cleaning facility, boiler, gas turbine, spray coating

booth, solvent cleaning tank, etc.

To download the CEQA guidelines, visit http://ceres.ca.gov/env-law/state.html.

To download this form and the instructions, visit http://www.agmd.gov/permit

	Yes	No]					
5.	0	•	Would this project result in noticeable off-si requirements?				•	
			For example, compost materials or other types of gre complaints subject to Rule 402 – Nuisance.	enwaste (i	e., lawn clippings, t	tree trimmings, etc.) have the po	otential to gene	erate odor
6.	0	•	Does this project cause an increase of emiss	sions fro	n marine vessel	ls, trains and/or airplanes?	1	
7.	0	•	Will the proposed project increase the QUAI by mobile vehicle to or from the site by greatatached Table 1?4					
	•		Section III - Water Resources					
8.	0	•	Will the project increase demand for water a The following examples identify some, but not all, typ generate steam; 2) projects that use water as part of production process; 4) projects that require new or ex exceeds the capacity of the local water purveyor to se existing water supply facilities.	es of proje the air poll (pansion of	cts that may result i ution control equipr existing sewage tr	in a "yes" answer to this question ment; 3) projects that require wa eatment facilities; 5) projects wh	n: 1) projects ter as part of there water dem	ne nand
9.	0	•	Will the project require construction of new Examples of such projects are when water demands or require new or modified sewage treatment facilities	exceed the	capacity of the loc	al water purveyor to supply suff		
			Section IV - Transportation/Circulation	sii t			ertung 199	\$207 H
10.		il (Almes) Alternation	Will the project result in (Check all that apply):					
	0	•	a. the need for more than 350 new employe					
	0	•	b. an increase in heavy-duty transport truck day?	k traffic to	and/or from the	e facility by more than 350	truck round	-trips per
	0	•	c. increase customer traffic by more than 70	00 visits	per day?			
			Section V - Noise			i i i i i i i i i i i i i i i i i i i	. 14	tek.
11.	0	•	Will the project include equipment that will g		noise GREATER	R THAN 90 decibels (dB) at	the propert	y line?
<u> </u>	1		Section VI - Public Services					
12.	1 4		Will the project create a permanent need for that apply):	new or a	dditional public	services in any of the folio	owing areas —	(Check all
	0	•	a. Solid waste disposal? Check "No" if the proj	ected pote	ntial amount of was	ites generated by the project is l	ess than five to	ons per day.
	0	•	b. Hazardous waste disposal? Check "No" if than 42 cubic yards per day (or equivalent in pounds)).			, ,	
			checked in the sections above, attach all pertinent info	rmation inc	luding but not limite	ed to estimated quantities, volun	nes, weights, e	tc.**
	ATURES					A Marie de la companya de la company		largy
BEST	OF MY KNO	OWLEDGE	LL INFORMATION CONTAINED HEREIN AND INFOF I UNDERSTAND THAT THIS FORM IS A SCREENIN IN DETERMINING CEQA APPLICABILITY.	RMATION S IG TOOL A	SUBMITTED WITH AND THAT THE SC	THIS APPLICATION IS TRUE AQMD RESERVES THE RIGH	AND CORRECT TO CONSID	ER OTHER
SIGNA			BLE OFFICIAL OF FIRM:			ONSIBLE OFFICIAL OF FIRM:		
	AUG	all	M.N. sore		Manager, E0			
–			RESPONSIBLE OFFICIAL OF FIRM:		-	S TELEPHONE NUMBER:	DATE Sign	ed: //2
	ael D. M		Lis pages and a viviant page and	***************************************	5937-450	TITLE OF PREPARER:	10181	Ur
SIGNA	NUKE UF F	KEPAKER	, IF PREPARED BY PERSON OTHER MAN RESPONSIBLE OFF	IUAL OF FIR	(M).	Associate Engineer II		
TYPE	OR PRINT	VAME OF	PREPARER:		PREPARER'S TI	ELEPHONE NUMBER:	DATE Sign	ed:
	o G. Vitl				(714) 5937-		916	<u>></u> ⊁

THIS CONCLUDES FORM 400-CEQA. INCLUDE THIS FORM AND THE ATTACHMENTS WITH FORM 400-A.

⁴ Table 1 – Regulated Substances List and Threshold Quantities for Accidental Release Prevention can be found in the Instructions for Form 400-CEQA.

TABLE 1.1 SUMMARY OF RESULTS

Parameter	Units	CAT 3512	DD 9163-7305	DD T163-7K16
Stack Height Above Ground Level (1)	Ft	24.292	32.958	27.833
Stack Inside Diameter	In	11.75	12.875	15.25
Stack Flow Rate	ACFM	5,030	6,920	9,381
Stack Flow Rate @ 68 deg F, 29.92 in Hg	DSCFM	1,886	3,600	4,332
Stack Temp	Deg F	843	502	597
Stack Moisture Content	% Vol	7.4	4.7	7.0
Test Load	KW	440	386	1150
Horsepower (Rated @ Full Load)	BHP	1482	1515	2935
Horsepower (Estimated Actual Based on KW Output) (2)	BHP	652	547	1688
PM Concentration (3)	gr/DSCF	0.0224	0.0169	0.0103
PM Mass Emissions (3)	Lb/Hr	0.36	0.52	0.38
PM Mass Emissions (Based on Rated BHP) (3)	Gm/BHP-Hr	0.111	0.156	0.103
PM Mass Emissions (Based on Estimated Actual BHP) (3)	Gm/BHP-Hr	∕0.252	0.434	0.059
O ₂ Concentration	% vd	11.59	16.40	12.30
CO ₂ Concentration	% vd	6.88	3.38	6.36
NO _x Concentration	ppmvd	1727	550	1356
NO _x Mass Emissions	Lb/Hr	23.33	14.18	42.08
NO _x Mass Emissions (Based on Rated BHP)	Gm/BHP-Hr	7.142	4.247	6.504
NO _x Mass Emissions (Based on Estimated Actual BHP)	Gm/BHP-Hr	16.233	11.762	11.308
CO Concentration	ppmvd	242	105	79
CO Mass Emissions	Lb/Hr	1.99	1.65	1.49
CO Mass Emissions (Based on Rated BHP)	Gm/BHP-Hr	0.609	0.493	0.231
CO Mass Emissions (Based on Estimated Actual BHP)	Gm/BHP-Hr	1.384	1.367	0.401
TGNMEO Concentration	ppmv	83.5	96.6	79.5
TGNMEO Mass Emissions	Lb/Hr	0.39	0.87	0.86
TGNMEO Mass Emissions (Based on Rated BHP)	Gm/BHP-Hr	0.120	0.259	0.133
TGNMEO Mass Emissions (Based on Estimated Actual BHP)	Gm/BHP-Hr	0.273	0.718	0.231

Height was measured as best as possible; however ground level was sloped for CAT 3512 and DD 9163-7305 buildings.

⁽²⁾ Horsepower is estimated based on calculated efficiency of full load generator to horsepower rating. Manufacturer curves should be utilized to more accurately determine horsepower at the test load.

⁽³⁾ PM data is for the front-half (probe, nozzle and filter components). Additional PM data for the condensable fraction is provided in Appendix A.

Mail Application To: SCAQMD P.O. Box 4944 Diamond Bar, CA 91765

Tel: (909) 396-3385 www.aqmd.gov

EMERGENCY INTERNAL COMBUSTION ENGINE

This form must be accompanied by a completed Application for a Permit to Construct/Operate -Form 400A, Form CEQA, Plot Plan and Stack Form Permit to be issued to (Business name of operator to appear on permit): **Orange County Sanitation District** Street location where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site): 22212 Brookhurst Street, Huntington Beach, CA 9264 Section A: EQUIPMENT LOCATION Model No.: Manufacturer: **Detroit Diesel** TI63-7K16 Date of Manufacture: Serial No.: Internal Combustion DD5272000532 01/01/1999 mm/dd/yyyy For an ICE manufactured after Engine 7/18/94, please provide Date of Installation: Manufacturer Maximum Rating: manufacturer's specification and 01/01/2000 mm/dd/yyyy guarantee. 2935.00 BHP@ 1800 O Flood Control O Pump Driver O Compressor ICE Emergency Electrical Generator O Fire Pump Function How Is This Type of Equipment Used? WithIn Facility Off- Site ☐ Rental Stationary Portable Type (Check All That Apply) (Check All That Apply) Other: Natural Gas Fuel Diesel Oll No. 2 O LPG O Two Cycle Four Cycle Cycle Type O Lean Burn Rich Burn **Combustion Type** O Four (Six O Eight Ten O Twelve Sixteen Other No. of Cylinders Turbocharged/Aftercooled Turbocharged Aspiration Type ☐ Timing Retarded > 4° (relative to standard timing) O Naturally Aspirated Selective Catalytic Reduction (SCR)* No Control Selective Non-catalytic Reduction (SNCR)* Air Fuel Ratio Controller Non-selective Catalytic Reduction (NSCR) Other (specify)_ Air Pollution Control Separate application is required. (if applicable) Model No.: Manufacturer: If already permitted, indicate Permit No. F21752 Device No. 1 at PB-B Section B: OPERATION INFORMATION: cu. ft./hr cu. ft./hr. Average Load: gal/hr. or **Fuel Consumption** Maximum Rated load: gal/hr. OR Normal: hours/day days/week weeks/yr. days/week weeks/yr. hours/day Operating Schedule Maximum:

CONFIDENTIAL INFORMATION

Under the California Public Records Act, all information in your permit application will be considered a matter of public record and may be disclosed to a third party. If you wish to keep certain items as confidential, please complete the following steps:

(a) Make a copy of any page containing confidential information blanked out. Label this page "public copy."

(b) Label the original page "confidential." Circle all confidential items on the page.

Testing & Maintenance:

(c) Prepare a written justification for the confidentiality of each confidential item. Append this to the confidential copy.

hours/year

Engine Data	(2) Provide ac Natural Ga	is, select Spark lg ression ignited di	ares from man nition. esel fuel intern	ufacturing specifications	CE's) must meet the S	Rated Power selected. If e	
	Rated Power	Year	Figures	Carbon Monoxide (grams/bhp-hr)	Hydrocarbons (grams/bhp-hr)	Oxides of Nitrogen (grams/bhp-hr)	Particulate Matter (grams/bhp-hr)
Compressor Ignit	tion	<u> </u>		(Stationards 111)	Marian Park	1 (Brannanah in) 1	Gramman III
	50 - 750 H.P.	·-····································					
		50 400110	BACT	8.5	1.0	6.9	0.38
	0	50 - 100 H.P.	Actual				
		400 475 11 5	BACT	8.5	1.0	6.9	0.38
	0	100 - 175 H.P.	Actual				
			BACT	2.6	1.0	3.8	0.15
	0	175 - 750 H.P.	Actual				
	751 and greater	H.P				I	
		2000 and	BACT	8.5	1.0	6.9	0.38
	0		Actual				
		l Elavera		Voc	NOx	co	
Sanda lauddan		Figures			NOX		

		Figures	VOC	NOx	CO
Spark Ignition		For natural gas fired or	LPG. The ICE must mee	t the requirements for B	ACT as listed below.
		BACT	1.5 grams/bhp-hr	1.5 grams/bhp-hr	2.0 grams/bhp-hr
	0	Actual			

cation is true and correct	THE RESERVE TO SERVE
TITLE OF PREPARER:	
Associate Engineer III	
CONTACT PERSON'S TELEPHONE NUMBER	DATE SIGNED:
(714) 593-7085	9/6/07
	cation is true and correct TITLE OF PREPARER: Associate Engineer III CONTACT PERSON'S TELEPHONE NUMBER

Official Use Only

Engr. Ini.	
A/N	
Appin Date:	
Class	

_	
Data	Innut
13010	71 I L I L I L I

Applicant	Orange County S	Sanitation District	اما	
Mailing Address	10844 Ellis Aven	ue, Fountain Valley, CA 92708		, ,
Equipment Location	22212 Brookhurs	st Street, Huntington Beach, CA 9264	Equipment Type	Fixed site
	Manufacturer:	Detroit Diesel		
	Model No:	TI63-7K16		
	Serial No.:	DD5272000532		
Equipment Description	Manufacturer Date:	01/01/1999		
	Installation Date:	01/01/2000		
,	Cylinders:	Sixteen		
	HP Rating:	2935.00		

	Turbocharged	Turbocharged/Aftercooled	Naturally Aspirated
Aspiration Type	0	X	0
	Turbocharged/Aftercooled		

	Generator	Compressor	Pump
Driving (ICE Emergency Function)	×	0	0
	Electrical Generator	-	

	VOC	NOx	CO	PM	
Emission Factors, g/HP-hr					
1- 16:43-20:50:00 c					
- 1-13-121-121-121-121-121-121-121-121-121	(Note: Emission factors taker				

	Yes	No	
Retard Timing			
A STORE CO.			

	Hrs/Day Max.	Hrs/Month Max	
Operating Schedule	Hrs/Day Ave.	 Wks/Yr	
Operating Schedule	Days/Wk.		
	Days/Mo		



Official Use Only

AN		
	A/N:	

Given

Given						
НР	2935.00					
G to its conversion factor	0.0022046					
	Hrs/Day Max.					
	Hrs/Day Avg.					
Operating Schedule	Days/Wk.					
Operating Schedule	Days.Mo.	***************************************				
	Hrs/Month Max.					
	Wks/Yr.					
	VOC	NOx	SOx	CO	PM	PM10
Emission Factors			0.160			
Retard Timing	Yes	No.		<u> </u>		
Retard Timing						
	VOC	NOX	SOx	60	PM	PM10
Emission Correction Factor	1.000		1.000		1.000	1.000

Computations

		VOC	NOx	SOx	CO	PM:	PM10
	Emission factor, g/HP-hr			0.160			
Janes de la companya				11. (1)			
433344376	.1			1.035			
	lb/day Max.						
1.4.14. 1.4.14.	lb/yr.						

Application No Previous Application I	: 474770 No: 357977		F	IRS/SS No: Previous Permit No: F2	1752		
Company Name:	ORANGE COUNTY SANITAT	ION DISTRICT		Facility ID:	29110		
Equipment Street:	22212 BROOKHURSTST , HI	JNTINGTON BEACH CA 92	646				
Equipment Desc:	I C E (>500 HP) EM ELEC GE	EN DIESEL					
Equipment Type :	BASIC			Fee Charged by:	R_CAT		
B-CAT NO. :	043902	C-CAT NO:	00	Fee Schedule			
Facility Zone :	18	Deemed Compl. Date:	10/31/2007	Public Notice:	_		
. comy zeme					-		
Disposition : A	Disposition : Approve PO, Recommended by Engineer				Small Business: ☐ Penalty: ☐ Identical Permit Unit: ✓		
Air quality Analysis				Filing Fee Paid:	\$0.00		
E.I.R			Permit	Processing Fee Paid:	\$461.96		
Health Risk Assessm	ent			Permit Processing Fee Calculated*:	\$461.96		
Significant Project				Permit Processing	\$0.00		
Expedited Processing)	Hours:		Fee Adjustment:	\$ 0.00		
Source Test Review		Hours:					
Time & Material		Hours:					
				Total Additional Fee:	\$0.00		
				Additional Charge:	\$0.00		
COMMENTS: THIS	S IS AN IDENTICAL EQUIPMEN	NT TO A/N 474769.					

RECOMMENDED BY: GAURANG RAWAL	DATE: 11/02/2007
REVIEWED BY:	DATE: 2128/08

^{*} ADJUSTED FOR SMALL BUSINESS, IDENTICAL EQUIPMENT AND P/O NO P/C PENALTY

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

AEIS DATA SHEET

Company Name: ORANGE COUNTY SANITATION DISTRICT

HUNTINGTON BEACH CA 92646

Application Number: 474770

Equipment B-Cat: 043902

Facility ID: 29110

Equipment C-Cat:

Estimated Completion Date: 02/27/08

Equipment Type: Basic

Equipment Description: I C E (>500 HP) EM ELEC GEN DIESEL

Equipment Address: 22212 BROOKHURST ST

-				
		Emissions		
	Emittants	R1 LB/HR	R2 LB/HR	
	со	6.03	6.03	
	NOX	46.74	46.74	
	PM10	0.64	0.64	
	ROG	2.87	2.87	
	sox	0.03	0.03	

Applicable Rules		
1470	06/01/2007	Requirements for Stationary Diesel-Fueled Internal Combustion and Other
401	11/09/2001	Visible Emissions
402	05/07/1976	Nuisance
404	02/07/1986	Particulate Matter - Concentration
431.2	09/15/2000	Sulfur Content of Liquid Fuels

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
Daily Start Times :	00:00	00:00	00:00	00:00	00:00	00:00	00:00	
Daily Stop Times :	01:00	00:00	00:00	00:00	00:00	00:00	00:00	

User's Initials: GR01

Date: 02/27/08

Supervisor's Name:

Review Date : 2 /28/05

NSR DATA SUMMARY SHEET

Application No:

474770

Application Type:

Change of Conditions

Application Status:

PENDAPPRV

Previous Apps, Dev, Permit #: 357977, 0 - ICE-PPS, NONE

Company Name:

ORANGE COUNTY SANITATION DISTRICT

Company ID:

29110

Address:

22212 BROOKHURST ST, HUNTINGTON BEACH, CA

RECLAIM:

NO

RECLAIM Zone:

01

Air Basin:

SC 18

ime V:

NO

Device ID:

0 - ICE-PPS

Estimated Completion Date: 12-30-2007

Heat Input Capacity:

0 Million BTU/hr

Priority Reserve:

NONE - No Priority Access Requested

Recommended Disposition: 31 - PERMIT TO OPERATE GRANTED

PR Expiration:

School Within 1000 Feet: NO Operating Weeks Per Year: 50

Operating Days Per Week: 1 Monday Operating Hours:

00:00 to 01:00 Tuesday Operating Hours: 00:00 to 00:00 Wednesday Operating Hours: 00:00 to 00:00

Thursday Operating Hours: 00:00 to 00:00 day Operating Hours:

00:00 to 00:00

urday Operating Hours: 00:00 to 00:00 Sunday Operating Hours:

00:00 to 00:00

Emittant:

CO

BACT:

Cost Effectiveness:

NO

Source Type:

MAJOR

Emis Increase: Modelina:

N/A

Public Notice:

N/A

CONTROLLED EMISSION

6.03 lbs/hr

Max Hourly:

6.03 lbs/day

Max Daily:

UNCONTROLLED EMISSION

Max Hourly:

6.03 lbs/hr

6.03 lbs/day

Max Daily: **CURRENT EMISSION**

BACT 30 days Avg:

Annual Emission:

1 lbs/day 301.5 lbs/yr

District Exemption:

None

Emittant:

NOX

BACT:

Cost Effectiveness:

NO

Source Type: Emis Increase: **MAJOR** 0

Modeling:

N/A

Public Notice:

CONTROLLED EMISSION

N/A

Max Hourly:

46.47 lbs/hr

Max Daily:

46.47 lbs/day

UNCONTROLLED EMISSION

Max Hourly:

46.47 lbs/hr

Max Daily:

46.47 lbs/day

CURRENT EMISSION

BACT 30 days Avg:

7 lbs/day

Annual Emission:

2323.5 lbs/yr

trict Exemption:

None

Emittant:

PM10

BACT:

Cost Effectiveness:

NO

Source Type:

MINOR

Emis Increase:

0

Modeling: Public Notice: N/A N/A

CONTROLLED EMISSION

0.64 lbs/hr

Max Hourly: Max Daily:

0.64 lbs/day

UNCONTROLLED EMISSION

Max Hourly:

0.64 lbs/hr

Max Daily:

0.64 lbs/day

CURRENT EMISSION

BACT 30 days Avg:

0 lbs/day

Annual Emission:

32 lbs/yr

District Exemption:

None

Emittant: BACT: Cost Effectiveness: Source Type: Emis Increase: Modeling: Public Notice: **CONTROLLED EMISSION** Max Hourly: Max Daily: **CURRENT EMISSION**

ROG

NO

MINOR 0

N/A N/A

2.87 lbs/hr 2.87 lbs/day

UNCONTROLLED EMISSION 2.87 lbs/hr Max Hourly: Max Daily: 2.87 lbs/day

BACT 30 days Avg: 0 lbs/day 143.5 lbs/yr Annual Emission:

District Exemption: None

Emiltant:

SOX

BACT:

Cost Effectiveness: NO MINOR Source Type: Emis Increase: 0

N/A Modeling: Public Notice: N/A CONTROLLED EMISSION

Max Hourly: 0.03 lbs/hr Max Daily: 0.03 lbs/day

UNCONTROLLED EMISSION 0.03 lbs/hr Max Hourly: Max Daily: 0.03 lbs/day

CURRENT EMISSION

BACT 30 days Avg: 0 lbs/day 1.5 lbs/yr Annual Emission: trict Exemption: None

CAT SUPERVISOR'S REVIEW DATE: 2/18/09 SUPERVISOR'S APPROVAL: ___

Processed By: amird 2/27/2008 10:10:34 AM

PERMIT TO OPERATE

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership. If the billing for the annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner

ID 29110

or Operator:

ORANGE COUNTY SANITATION DISTRICT

P O BOX 8127

FOUNTAIN VALLEY, CA 92728-8127

Equipment Location:

22212 BROOKHURST ST, HUNTINGTON BEACH, CA 92646-8457

Equipment Description:

INTERNAL COMBUSTION ENGINE, NO. 1 AT PB-B, DETROIT DIESEL, 16 CYLINER, TURBOCHARGED, AFTERCOOLED, MODEL T163-7K16, 2935 BHP, SERIAL NUMBER DD5272000532, DIESEL-FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

Conditions:

- 1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
- 2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
- 3. THIS ENGINE SHALL NOT OPERATE MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
- 4. AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
- 5. THE OPERATION OF THE ENGINE BEYOND 50 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.
- 6. THIS ENGINE SHALD NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO SO BY THE UTILITY OR THE GRID OPERATOR.

deleted in PPS

PERMIT TO OPERATE



AN ENGINE OPERATING LOG SHALL BE MAINTAINED WHICH ON A MONTHLY BASIS SHALL LIST ALL ENGINE OPERATIONS IN EACH OF THE FOLLOWING AREAS:

- A. EMERGENCY USE HOURS OF OPERATION
- B. MAINTENANCE AND TESTING HOURS
- C. OTHER OPERATING HOURS (DESCRIBE THE REASON FOR OPERATION) IN ADDITION, EACH TIME THE ENGINE IS STARTED MANUALLY, THE LOG SHALL INCLUDE THE DATE OF OPERATION AND THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION THE LOG SHALL BE KEPT FOR A MINIMUM OF FIVE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION FOR THE PREVIOUS CALENDAR YEAR SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR.



THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Dorris M.Bailey/GR01

Gaurang Rawal

From: Vitko, Ted [TVITKO@OCSD.COM]

Sent: Monday, November 05, 2007 9:57 AM

To: Gaurang Rawal

Subject: OCSD P2 Diesel Engine Information

Hi Gaurang,

Here's the information you requested over the phone. Let me know if you have any other question. Thanks

	Equipment	Permi	t #	Serial #	Model #	
✓ Detroit Diesel No.1	Power Bui	lding B	R-F21	1752 ^r	DD5272000532	T163-7K16
Detroit Diesel No.2	Power Bui	lding B	R-F21	1753	DD5272000531	T163-7K16

Ted Vitko

Air ality Compliance

Extension 7442

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	PAGE I	of 2
	A/N	474770
ENGINEERING AND COMPLIANCE	PROCESSED BY	GCR
	CHECKED BY	
APPLICATION PROCESSING AND CALCULATIONS	DATE	11/2/2007

Applicant's Name:

ORANGE CO. SAN DIST (OCSD)

Mailing Address:

10844 ELLIS AVE

FOUNTAIN VALLEY, CA 92708

Equipment Location:

22212 HUNTINGTON ST, HUNTINGTON BEACH, CA 92646

Equipment Description:

INTERNAL COMBUSTION ENGINE

MANUFACTURER:

DETROIT DIESEL #

MODEL NO.:

T163-7K16

FUELED WITH:

DIESEL

DRIVING:

EMERGENCY GENERATOR

SERIAL NO .:

MA DD 5272000532

CYLINDERS:

16

ASPIRATION:

TURBOCHARGED AND AFTERCOOLED

HP RATING:

2935

HISTORY/PROCESS DESCRIPTION:

Application date:

10/19/2007

Class:

- 3

The application was filed for change of permit condition for R1470 Compliance. The company conducted source tets to allow more hours for testing and maintenance. With 0.103gm/bhp-hr of PM, the company is allowed 50 hrs. PM test results are on file and were reviewed.

CALCULATIONS:

See ATTACHMENT A.

EVALUATION:

Rule 212:

This is not a significant project, no school within 1000', emis below daily threshold. Public notice is not required.

Rule 401:

Based on experience with similar equipment, this engine is expected to comply with the visible emission limits.

Rule 402:

Based on experience with similar equipment, nuisance complaints are not expected.

Rule 404:

Based on experience with similar equipment, compliance with this rule is expected.

Rule 431.2:

Diesel fuel supplied to this equipment must contain 0.0015% or less sulfur by weight. Compliance is expected.

REGULATION XIII: New Source Review (Amended December 6, 2002)

There is reduction in PM emission. Therefore, the requirements of this rule do not apply.

RULE 1401: Exempt as per section (g)(1)(F)

Rule 1470: Equipment can operate up to 30 hrs/yr for maintenance and testing based on S/T PM result

of 0.103 gm/bhp-hr, Rule 1470 (3) (C) (ii) (I), amended June 1, 2007. Compliance is expected. Two ergre fm < 0.15)

can neet DRF-ISC requirements. Coc

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	PAGE 2	of 2
	A/N	474770
ENGINEERING AND COMPLIANCE	PROCESSED BY	GGR
	CHECKED BY	GGR
APPLICATION PROCESSING AND CALCULATIONS	DATE	11/2/2007

DISCUSSIONS:

Based on the information submitted with the application, the engine will operate:

[] in violation of BACT.

[X] in compliance with all the applicable Rules and Regulations of the District.

CONDITIONS

- 1 OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED.
- 2 THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITIONS AT ALL TIMES.

REFER TO SAMPLE PERMIT FOR OTHER CONDITIONS.

Emergency ICEs

~				
(11	1,	10	н	
	•		,,	٠

HP	2,935
g to lb conversion factor	0.0022046
Operating schedule	
hrs/day Max.	1
hrs/day Avg.	1
days/wk	1
hrs/month Max.	4
wks/yr	50

<u>!</u>	VOC	NOx	SOx	CO	PM	PM10
Emission factors			0.0049		0.103	0.10

	Yes	No
Retard Timing	0	X

	VOC	NOx	SOx	CO	PM	PM10
Emission correction factor	l	1	1	1	1	1

Computations:

	VOC	NOx	SOx	CO	PM	PM10
Emission factor, g/HP-hr	0	0.00	0.0049	0.00	0.103	0.10
lb/hr	0.00	0.00	0.03	0.00	0.67	0.64
lb/day Max.	0	0	0	0	1	1
lb/day Avg.	0	0	0	0	0	0
lb/yr	-	-	1.62	-	33.99	32.63

VOC= 2.87 lbs/hr, NOx= 46.74 lbs/hr, and CO = 6.03 lbs/hr, kept same as under previous PO F21752

Data Inputs

	000000000000000000000000000000000000000
ENGR. INI.	GCR
A/N	474770
Appln Date:	10/19/2007
Class:	3

Applicant:

ORANGE CO. SAN DIST (OCSD)

Mailing address:

10844 ELLIS AVE FOUNTAIN VALLEY, CA 92708

Equipment Address:

22212 HUNTINGTON ST, HUNTINGTON BEACH, CA 92646

MANUFACTURER:

MODEL NO.: SERIAL NO.:

CYLINDERS: HP RATING:

DETROIT DIESEL. #1 T163-7K16 DDS**272 NA 000532** 16

2935

	Turbocharged/ Naturally	
Turbocharged	Aftercooled	Aspirated
	X	

TURBOCHARGED AND AFTERCOOLED

Driving:

Generator	Compressor	Pump
Χ		

GENERATOR

	VOC	NOx	CO	PM*
Emission Factors, g/HP-hr				0.103
AP-42				* S/test

 Yes
 No

 Retard Timing
 0
 X

Operating schedule

hrs/day Max. hrs/day Avg, days/wk hrs/month Max. wks/yr 1 1 1 4 50

- 7:30 a.m. and 4:30 p.m. on days when school is in session, until control equipment is in place, when the hours would be between 7:30 a.m. and 3:30 p.m.; and
- (iii) An engine that is located more than 100 meters (328 feet) and less than or equal to 500 feet from a school shall not be operated for non-emergency use between the hours of 7:30 a.m. and 3:30 p.m. on days when school is in session. An engine that emits diesel PM at a rate of 0.01 g/bhp-hr or less is not subject to this restriction.
- (3) (C) Except as provided in subdivision (h), no owner or operator of an incuser stationary emergency standby diesel-fueled CI engine (> 50 hp) shall operate the engine in the South Coast Air Quality Management District unless it meets, in accordance with the applicable compliance schedules specified in subdivision (e), the following requirements:
 - (i) Diesel PM Standard and Hours of Operating Requirements

 The owner or operator of in-use stationary emergency standby diesel-fueled engines (>50 bhp), except those located on school grounds or 100 meters or less from an existing, as of April 2, 2004, school shall meet the following requirements:
 - (I) No owner or operator shall operate an in-use a stationary emergency standby diesel-fueled CI engine (>50 bhp) that emits diesel PM at a rate greater than 0.40 g/bhp hr more than 20 hours per year for maintenance and testing purposes. In-use emergency standby diesel fueled CI engines operated at health facilities shall be allowed up to 10 additional hours per year for maintenance and testing purposes. This section does not limit engine operation for emergency use and for emission testing to show compliance with subparagraph (c)(3)(C).
 - (II) No owner or operator shall operate an in-use stationary emergency standby diesel-fueled CI engine (>50 bhp) that emits diesel PM at a rate less than or equal to 0:40 g/bhp-hr more than 30 hours persyear for maintenance and testing purposes, except as provided in clause (c)(3)(C)(ii). This subclause does not limit engine operation for emergency use and for emission testing to show compliance with subparagraph (c)(3)(C).

(ii) Alternative Diesel PM Standard and Hours of Operating Requirements

The Executive Officer may allow the owner or operator of an in-use emergency standby diesel-fueled CI engine (> 50 hp), except those located on school grounds or 100 meters or less from an existing, as of April 2, 2004, school, to operate more than 30 hours per year for maintenance and testing purposes on a site-specific basis, provided the following limits are met:

- (I) Up to 50 annual hours of operation are allowed for maintenance and testing purposes if the diesel PM emission rate is less than or equal to 0.15 g/bhp-hr:
 - (II) Up to (100 annual hours) of operation are allowed for maintenance and testing purposes if the diesel PM emission rate is less than or equal to 0.01 g/bhp-hr.
 - (iii) Diesel PM Standards and Hours of Operating Requirements For In-Use Stationary Emergency Standby Diesel-Fueled Engines (>50 Bhp) Located on School Grounds or 100 Meters or Less from an Existing, as of April 2, 2004, Schools

All in-use emergency diesel-fueled CI engines (> 50 bhp), subject to this clause, certified in accordance with the Off-Road Compression-Ignition Engine Standards (Title 13, CCR, Section 2423) shall comply with either option 1 or option 2 below. All engines not certified in accordance with the Off-Road Compression-Ignition Engine Standards (Title 13, CCR, Section 2423) shall comply with option 1, option 2, or option 3 below:

- (I) Option 1: Reduce the diesel PM emission rate by at least 85 percent, by weight, from the baseline level, in accordance with the appropriate compliance schedule specified in subdivision (e) and operate 75 hours or less per year for maintenance and testing purposes. This subclause does not limit engine operation for emergency use and for emission testing to show compliance with subparagraph (c)(3)(C); or
- (II) Option 2: Emit diesel PM at a rate less than or equal to 0.01 g/bhp-hr in accordance with the appropriate compliance schedule as specified in subdivision (e) and operate 100 hours or less per year for maintenance and testing purposes.



ORANGE COUNTY SANITATION DISTRICT PLANT NO. 2 EMERGENCY DIESEL GENERATORS 2004 ENGINEERING SOURCE TEST REPORT

PREPARED FOR:

Orange County Sanitation District
Post Office Box 8127
10844 Ellis Avenue
Fountain Valley, California 92728-8127

EQUIPMENT LOCATION:

Plant No. 2

Internal Combustion Engine Emergency Diesel-Fired Generators
Huntington Beach Wastewater Treatment Facility
Huntington Beach, California

TEST DATES:

June 15-17, 2004

ISSUE DATE:

July 15, 2004

PREPARED BY:

Mr. Michael W. Bell

SCEC

1582-1 North Batavia Street

Orange, California 92867

Report No:

2061.1014.mt1

Tested By:

Michael W. Bell

Reviewed By:

Leslie A Idenson

TABLE 1.1 SUMMARY OF RESULTS

Paramèter	Units	CAT 3512	DD 9163-7305/	DD T163-7K16	
Stack Heigh: Above Ground Level (1)	Ft	24.292	32,958		
Stack Inside Diameter	In	11.75	32,938 12,875	27:833	
Stack Flow Rate	ACFM	5,030	6,920	15.25	1
Stack Flow Rate @ 68 deg F, 29.92 in Hg	DSCFM	1,886	3,600	9,381 4,332	
Stack Temp	Deg F	843	502	597	
Stack Moisture Content	% Vol	7.4	4.7	7.6	
Test Load	ĸw	440	386	1150	,
Horsepower (Rated @ Full Load)	ВНР	1482	1515		
Horsepower (Estimated Actual Based on KW Output). (2)	ВНР	652	547	1688	58% load
PM Concentration (3)	gr/DSCF	0.0224	0.0169	0.0103	
PM Mass Emissions (3)	Lb/Hr	0.36	0.52	0.30	
PM Mass Emissions (Based on Rated BHP) (1)	Gm/BHP-Hr	0.111	0.156	0.103	1686 BHP.
PM Mass Emissions (Based on Estimated Actual BHP) (6)	Gm/BHP-Hr	0.252	0.434	0.059	
O ₂ Concentration	% vd	11:59	16:40	12.30	
CO ₂ Concentration	% vd	6.88	3.38	6.36	
NO _x Concentration	ppmvd	1727.	550	1356	l l
NO _k Mass Emissions	L5/Hr	23.33	330 ï4.18	42.08	
NO, Mass Emissions (Based on Rated BHP)	Gm/BHP-Hr	7.142	4.247		
NO _x Mass Emissions (Based on Estimated Actual BHP)	Gm/BHP-Hr		•	6.504	
CO Concentration	1	16.233	11.762	11.308:	
CO Mass Emissions	ppmvd	-242	105	7. 9 .	
CO Mass Emissions (Based on Rated BHP)	Lb/Hr	1.99	1.65	1.49	
CO Mass Emissions (Based on Estimated Actual BHP)	Gm/BHP-Hir	0.609	9.493	0:231	
TGNMEO.Concentration	Gm/BHP-Hr	1.384	1.367	0.401	
TGNMEO Mass Emissions	ppmv	83.5	96.6	79.5	
TGNMEO Mass Emissions (Based on Rated BHP)	Lb/Hr	0.39	0.87	0.86	
TGNMEO Mass Emissions (Based on Estimated Actual BHP)	Gan/BHP-Hr	0.120	0:259	0.133	
(Canada Ari Caminater Actual DAL)	Gm/BHP-Hr	0:273	0.718	0.231	I

⁽i) Height was measured as best as possible; however ground level was sloped for CAT 3512 and DD 9163-7305 buildings.

⁽²⁾ Horsepower is estimated based on calculated efficiency of full load generator to horsepower rating. Manufacturer curves should be utilized to more accurately determine horsepower at the test load:

⁽³⁾ PM data is for the front-half (probe, nezzle and filter components). Additional PM data for the condensable fraction is provided in Appendix A.

SUMMARY OF PARTICULATE EMISSIONS

Date: June 17, 2004		· · ·- ·					
Client: QesD		7					i
Site: Plant 2 DD T163	-7K16 EG Exha	aust				1	
Market Market Control	in Grant States				20 A 40 A		
PARTICULATE TYPE	SYMBOL	UNITS		RUN 1	RUN 2	AVERAGE	
Note that the second second				100000	Kabulani da	ا الله الموا	
FILTERABLE PARTICULATE			-77			irgi e	
NET MILLIGRAMS	mg	mġ	7 - T	28.6	24.9	26.8	
CONCENTRATION	Csd	gr/SDCF	Tr.	0.0110	0.0096	0.0103	
CONCENTRATION @ 12% CO2	Csd,12	gr/SDCF		0.0208	0.0181	0.0194	
EMISSION RATE	E.R.	(LB/HR)	<i>ii</i> ,	0.41	0.35	(0.38	•
EMISSION RATE	E.R.	LB/DAY		9.88	8.49	9.19	0.7
EMISSION RATE (i)	E.R.	gm/BHP-Hr	空電	0.111	0.095	0.103	-0.3
EMISSION RATE ⁽²⁾	E.R.	gm/BHP-Hr	鸄	0.064	0.055	0.059	01
Marie Resident April 1985		1000110000	'n.		30 m		
CONDENSABLE PARTICULATE					S. L. Y.	4	
NET MILLIGRAMS	mg	mg.		19.7	25.8	22.8	!
CONCENTRATION	Csd	gr/SDCF	1 1	0.0076	0.0099	0.0088	
CONCENTRATION @ 12% CO2	Csd,12	gt/SDCF	4	0.0143	0.0188	0.0165	
EMISSION RATE	E.R.	LB/HR		0.28	0:37	(0.33)	
EMISSION RATE	E.R.	LB/DAY	4	6.81	8.82	7.81	
EMISSION RATE (1)	E.R.	gm/BHP-Hr		0.076	0.099	0.087	
EMISSION RATE (2)	E.R.	gm/BHP-Hr	2	0.044	0:057	0.050	
CONTRACTOR OF THE STATE OF THE	ALTERNATION OF THE STATE OF		李	es internet		Andrew Construction	
ORGANIC PARTICULATE			ą.	correct September 1			
NET MILLIGRAMS	mg	mg		NA	NA	NA	ľ
CONCENTRATION	Csd	gr/SDCF	- (* °) - (*)	NA	NA	NA	
CONCENTRATION @ 12% CO2	Csd,12	gr/SDCF		NA	NA	NA	
EMISSION RATE	E.R.	LB/HR	- 3	NÁ	NA	NA	
EMISSION RATE	E.R.	LB/DAY		NA	NA	,NA	
ENGINEE CONTRACTOR			,,,,	programme de	*		1
TOTAL PARTICULATE			1		With the same		
NET MILLIGRAMS	mg	mg	(B)	48:3 V	50.7	49.5 V	1
CONCENTRATION	Csd	gr/SDCF	100	0.0136	0.0195	0.0191	1
CONCENTRATION @ 12% CO2	Csd,12	gr/SDCF		0.0352	0.0368	0.0360	1 د
EMISSION RATE	E.R.	(LB/HR)		0.70	0.72	(0.71	12
EMISSION RATE	E.R.	LB/DAY		16.68	17.31	17.00]
EMISSION RATE ⁽¹⁾	E.R.	gm/BHP-Hr]	0.187	0.194	0.190]
EMISSION RATE (2)	E.R.	gm/BHP-Hr].	0.107	0.111	0.109]
	पूर्व हिन्दे कुराह्म्य स्थापना 	en mer var var var var var var var var var va	T .				ľ

Note: NA = Not Applicable

⁽i) Calculated based on estimated horsepower during test.

⁽²⁾ Calculated based on full load rated horsepower listed in permit.

PARTICULATE LABORATORY DATA

		Date:	June 17, 2004	-		· · ·		
		Client:	OCSD					
		Site:	Plant 2 DD T16	3-7K16 EG	Exhaust			
4.76.65	Martin Park to be			AND THE RES	general Hara General Hara	eren er anna er		
			2 ** * * * * * * * * * * * * * * * * *		Diskana fari sa akan A		with the same of t	
		1		VIc less			Uncorrected	Corrected
Run No.	Туре	Total Sample	Aliquot	Silica gel	Gross.Wt.	Tare Wt.	Final Wt.	Final Wt.
		Vol. (ml)	Vol. (ml)	Vol. (ml)	(g)	(ġ)	(mg)	(mig)
red airre	and being make	e Time of			ARCH HELD	as said	्रक्ता सम्बद्धितः । अस्तर्भावस्थान	
Blank	Асетопе	150			103.009,4	103.0094	0.00	
Blank	H2O	200			99.9375	99.9370	0.50	
Blank	MeCl2	NA			NA	NA	NA	
1	Filter	******			0.5303	.0.5145	15.80	15.80
	Front Half Rinses	185	185	*****	106.2054	106.1926	12.80	12.80
$\tau Y \in \mathbb{R}$	Condensables	450	450	54.9	86.5098	86.4891	20.70	19.71
	Organics	NA	NA	NA	NA:	NA	.NA	ÑA
3 A 1 - A	Total						49,30	48.31
			6400	in Co	ing the second s	2 2 13 2 2 3	. S. 1	_1_
-2	Filter		<u></u>		0.5101	0.4960	14.10	14.10
	Front Half Rinses	205	205		103.0924	103.0816	10.80	10.80
	Condensables	440	440	56.7	98.6282	98.6014	26.80	25.84
	Organics	NA	NA	NA	NA	NA.	NA	NA
	Total					,	51.70	50.74

Note: NA = Not Applicable for the test program.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT 21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO CONSTRUCT/OPERATE

page 1 Permit No. R-F21752 A/N 357977

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

LEGAL OWNER

ID 029110

OR OPERATOR:

ORANGE, COUNTYOF - SANITATION DISTRICT

P O BOX 8127

FOUNTAIN VALLEY, CA 92728-8127

Equipment Location:

22212 BROOKHURST ST, HUNTINGTON BEACH, CA 92646-8457

Equipment Description:

INTERNAL COMBUSTION ENGINE, DETROIT DIESEL, 16 CYLINDER, TURBOCHARGED, AFTERCOOLED, MODEL T163-7K16, 2935 BHP, DIESEL-FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

Conditions:

- 1) OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
- 2) THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
- 3) THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY CALENDAR YEAR.
- 4) A NON-RESETTABLE TOTALIZING TIMER SHALL BE INSTALLED AND MAINTAINED, IN GOOD OPERATING CONDITION, TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
- 5) AN ENGINE OPERATING LOG, LISTING THE DATE OF OPERATION, THE ELAPSED TIME, IN HOURS, AND THE REASON FOR OPERATION SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF TWO YEARS AND MADE AVAILABLE TO AOMD PERSONNEL UPON REQUEST.
- 6) SULFUR CONTENT OF DIESEL FUEL SUPPLIED TO THIS ENGINE SHALL NOT EXCEED 0.05% BY WEIGHT.

THIS PERMIT TO CONSTRUCT/OPERATE R-F21752 SUPERSEDES PERMIT TO CONSTRUCT/OPERATE F21752 ISSUED 8/20/1999.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT 21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO CONSTRUCT/OPERATE

page 2 Permit No. R-F21752 A/N 357977

CONTINUATION OF PERMIT TO CONSTRUCT/OPERATE

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Deris on Bailey

By Dorris M. Bailey/gr01 02/22/01

TERRY AHN
ORANGE COUNTY SANITATION DISTRICT
P O BOX 8127
FOUNTAIN VALLEY, CA 92728

Facility ID: 29110

Located at: 22212 BROOKHURST ST, HUNTINGTON BEACH

Thank you for filing your application(s) with the South Coast Air Quality Management District (AQMD).

The application number(s) assigned by AQMD to your application package(s) is/are on Page 2 of this letter. Please refer to the information on Page 2 when contacting AQMD for assistance. The information you submitted with your application(s) or in your latest submittal is complete to the extent that allows us to begin processing of your application(s), however some clarifying data may still be needed. The acceptance of your application(s) does not imply that permit(s) has/have been approved. The engineer assigned to process your application(s), as indicated below, may contact you if additional information is required.

If you have any question or need additional information about your application(s), please contact the engineer listed below:

Engineer: Gaurang Rawal Telephone: (909) 396 - 2543

For general information about AQMD's permitting process, please call (909) 396-2468.

cc: Application file(s)

AQMD PERMIT APPLICATION INFORMATION

(Please refer to this information when contacting AQMD for Assistance)

10/31/2007

Facility ID: 29110

Application Number (s)	Equipment Descrip	ofion	
474766	C E (>500 HP) EM ELEC GEN DIESEL	Catt. 1482BHP	
474767	I C E (>500 HP) EM ELEC GEN DIESEL	11 1/	Ident.
474768	I C E (>500 HP) EM ELEC GEN DIESEL	11 11	Jeden .
474769	I C E (>500 HP) EM ELEC GEN DIESEL	Det. OSL, 2935!	
474770	I C E (>500 HP) EM ELEC GEN DIESEL	tt II	[Idens.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

ENGINEERING AND COMPLIANCE

APPLICATION PROCESSING AND CALCULATIONS

PAGE	1 of 3	1
FAUE		
CHECKED BY:		For
A/N:		Official
PROCESSED BY:		Use Only
DATE:		

Applicant's Name: Orang	ge County Sanitation District	ID:
Equipment Location: 22	212 Brookhurst Street, Huntington Beach, CA 9	264
Equipment Description:		
EQUIPMENT:	INTERNAL COMBUSTION ENGINE	Permit Description:
MANUFACTURER:	Detroit Diesel	INTERNAL COMBUSTION ENGINE,
MODEL NO.:	TI63-7K16	Fixed site, Detroit Diesel, MODEL NO.
FUELED WITH:	Diesel Oil No. 2	TI63-7K16, SERIAL NO. DD5272000532, Diesel Oil No. 2 FUELED, Four CYCLES,
DRIVING:	Electrical Generator	Sixteen CYLINDERS, Turbocharged/Aftercooled, RATED AT
SERIAL NO.:	DD5272000532	2935 B.H.P., DRIVING AN EMERGENCY
CYLINDERS:	Sixteen	Electrical Generator.
ASPIRATION:	Turbocharged/Aftercooled	
HP RATING:	2935.00	

CALCULATIONS See ATTACHMENT A

EVALUATION:

Rule 212: (Not Applicable if within 1,000 feel of a school.)

This is a not significant project as defined by this rule. Hence, public notice is not required.

Rule 401:

Based on experience with similar equipment, this engine is expected to comply with the visible emission limits.

Rule 402

Based on experience with similar equipment, nuisance complaints are not expected.

Rule 404:

Based on experience with similar equipment, compliance with this rule is expected.

Rule 431.2:

Diesel fuel supplied to this equipment must contain 0.05% or less sulfur by weight. Compliance is expected.

Rule 1110.2:

Exempt per Rule 1110.2 (i)(2) and (i)(10).

REGULATION XIII:

Exempt per Rule 1301 (b)(3).

REGULATION XIV:

Exempt per Rule 1401 (g)(1)(F).

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE WORKSHEET APPLICATION PROCESSING AND CALCULATIONS PAGE 2 of 3 CHECKED BY: A/N: PROCESSED BY: DATE:

CARB-EPA Emission Limits for Nonroad Compression-Ignited Engines:

For engine manufacture date on or after 01/01/1999 and engine rating between ______, the following emission limits apply:

	NOx	ROG	· co	PM
Required				
Actual				
Compliance				

CONDITIONS

- 1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED.
- 2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITIONS AT ALL TIMES.
- SULFUR CONTENT OF DIESEL FUEL SUPPLIED TO THE ENGINE SHALL NOT EXCEED 0.05% BY WEIGHT.
- 4. THIS ENGINE SHALL NOT OPERATE MORE THAN 200 HOURS IN ANY ONE YEAR.
- 5. THIS ENGINE SHALL NOT OPERATE MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
- 6. AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
- 7. AN ENGINE OPERATING LOG LISTING THE DATE OF OPERATION AND THE ELAPSED TIME, IN HOURS, AND THE REASON FOR OPERATION SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF TWO YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
- 8. IN ADDITION TO MAINTENANCE AND TESTING OF THIS ENGINE, THIS ENGINE SHALL ONLY BE USED FOR EITHER PROVIDING ELECTRICAL POWER TO PORTABLE OPERATIONS OR EMERGENCY POWER TO STATIONARY SOURCES. PORTABLE OPERATIONS ARE THOSE WHERE IT CAN BE DEMONSTRATED THAT BECAUSE OF THE NATURE OF THE OPERATION. IT IS NECESSARY TO PERIODICALLY MOVE THE EQUIPMENT FROM ONE LOCATION TO ANOTHER. EMERGENCIES AT STATIONARY SOURCES ARE THOSE THAT RESULT IN AN INTERRUPTION OF SERVICE OF THE PRIMARY POWER SUPPLY OR DURING STAGE II OR III ELECTRICAL EMERGENCIES DECLARED BY THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

ENGINEERING AND COMPLIANCE

APPLICATION PROCESSING AND CALCULATIONS

PAGE	3 of 3	10 (15) (15) (15) (15) (15) (15) (15) (15)
CHECKED BY:		For
A/N:		Official
PROCESSED BY:		Use Only
DATE:		

- 9. UPON THE FIFTH DAY AFTER PLACEMENT OF THIS EQUIPMENT INTO OPERATION AT A NEW SITE, THE DISTRICT SHALL BE NOTIFIED VIA TELEPHONE AT 1-877-810-6995 OF THE EXACT NATURE OF THE PROJECT AS FOLLOWS:
 - A. THE PERMIT NUMBER OF THE PORTABLE EQUIPMENT.
 - B. THE NAME AND TELEPHONE NUMBER OF A CONTACT PERSON.
 - C. THE LOCATION WHERE THE PORTABLE EQUIPMENT WILL BE OPERATED.
 - D. THE ESTIMATED TIME THE PORTABLE EQUIPMENT WILL BE LOCATED AT THE SITE.
 - E. DESCRIPTION OF THE PROJECT.
 - F. IF LESS THAN 1/4 MILE, THE DISTANCE TO THE NEAREST SENSITIVE RECEPTOR. SENSITIVE RECEPTORS ARE DEFINED AS LONG-TERM HEALTH CARE FACILITIES, REHABILITATION CENTERS, CONVALESCENT CENTERS, RETIREMENT HOMES, RESIDENCES, SCHOOLS, PLAYGROUNDS, CHILD CARE CENTERS, AND ATHLETIC FACILITIES.
- 10. THIS ENGINE AND ITS REPLACEMENT UNIT INTENDED TO PERFORM THE SAME OR SIMILAR FUNCTION, SHALL NOT RESIDE AT ANY ONE LOCATION FOR MORE THAN 12 CONSECUTIVE MONTHS. THE PERIOD DURING WHICH THE ENGINE AND ITS REPLACEMENT IS MAINTAINED AT A STORAGE FACILITY SHALL BE EXCLUDED FROM RESIDENCY TIME DETERMINATION.
- 11. THIS ENGINE SHALL NOT BE REMOVED FROM ONE LOCATION FOR A PERIOD OF TIME, AND THEN IT OR ITS EQUIVALENT ENGINE RETURNED TO THE SAME LOCATION, IN ORDER TO CIRCUMVENT THE PORTABLE ENGINE RESIDENCE TIME REQUIREMENTS.

ORANGE COUNTY 10844 Ellis Avenue, P.O. Box 8127
SANITATION DISTRICT Fountain Valley, CA 92728-8127
(714) 962-2411

VENDOR NO. 15843 DATE: 10/17/07 CHECK NO. 1000095039
VENDOR NAME SOUTH COAST AIR QUALITY MGT RE

INVOICE NO.	INVOICE DATE	DESCRIPTION	GROSS AMOUNT	DISC ADJ.	PAYMENT AMOUN
SCAQMD PERMIT # F21752	09/04/07	SCAQMD Permit No. F217	923.92		923.92
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P.O. Box 8127 • Fountain Valley, CA 92728-8127 ORANGE COUNTY SANITATION DISTRICT PERMIT # F21752

US POSTAGE

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10/17/2007

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South Coast Air Quality Management District P.O. Box 4944

Diamond Bar CA 91765 COURT PASCENT